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| APPLICATION NO. FILING DATE |  | FIRST NAMED INVENTOR |              | ATTORNEY DOCKET NO. |  |
|-----------------------------|--|----------------------|--------------|---------------------|--|
| _                           |  |                      | E            | EXAMINER            |  |
| proximate and some          |  |                      | ART UNIT     | PAPER NUMBER        |  |
|                             |  |                      | DATE MAILED: | 10                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

|   | A   | oplication No.  | Applicant(s)  |  |  |  |  |  |
|---|---|---|---|--|--|--|--|--|
| Office Action Summary   |   | 9/662,254   | MOYER ET AL.  |  |  |  |  |  |
|   |   | aminer  | Art Unit  |  |  |  |  |  |
|   | Ar  | nne M Beckerleg   | 1632  |  |  |  |  |  |
| The MAILING DATE of this c<br>Period for Reply  | ommunication appears  | on the cover sheet w  | ith the correspondence address  |  |  |  |  |  |
| A SHORTENED STATUTORY PE<br>THE MAILING DATE OF THIS CO<br>- Extensions of time may be available under the<br>after SIX (6) MONTHS from the mailing date<br>- If the period for reply specified above is less to<br>- If NO period for reply is specified above, the re-<br>- Failure to reply within the set or extended per<br>- Any reply received by the Office later than the<br>earned patent term adjustment. See 37 CFR<br>Status | DMMUNICATION. e provisions of 37 CFR 1.136 (a) of this communication. han thirty (30) days, a reply with naximum statutory period will ap iod for reply will, by statute, caus ee months after the mailing date | . In no event, however, may<br>in the statutory minimum of th<br>ply and will expire SIX (6) MC<br>te the application to become | a reply be timely filed irty (30) days will be considered timely. INTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133). |  |  |  |  |  |
| 1) Responsive to communica  | tion(s) filed on  |   |   |  |  |  |  |  |
| 2a)☐ This action is <b>FINAL</b> .  | 2b)⊠ This a   | ction is non-final.   |   |  |  |  |  |  |
| 3) Since this application is in closed in accordance with   |   |   | atters, prosecution as to the merits is 3.D. 11, 453 O.G. 213.  |  |  |  |  |  |
| Disposition of Claims   |   |   |   |  |  |  |  |  |
| 4) Claim(s) 1-75 is/are pendin  | g in the application.   |   |   |  |  |  |  |  |
| 4a) Of the above claim(s)   | is/are withdrawn f  | rom consideration.  |   |  |  |  |  |  |
| 5) Claim(s) is/are allow  | ed.   |   |   |  |  |  |  |  |
| 6) Claim(s) is/are reject   | _   |   |   |  |  |  |  |  |
| 7) Claim(s) is/are objec  |   |   |   |  |  |  |  |  |
| 8) Claims 1-75 are subject to   |   |   |   |  |  |  |  |  |
| Application Papers  |   |   |   |  |  |  |  |  |
| 9) The specification is objected  | d to by the Examiner.   |   |   |  |  |  |  |  |
| 10) The drawing(s) filed on is/are objected to by the Examiner.   |   |   |   |  |  |  |  |  |
| 11) The proposed drawing corre  | 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved.  |   |   |  |  |  |  |  |
| 12) The oath or declaration is o  | bjected to by the Exam  | iner.   |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |   |   |  |  |  |  |  |
| 13) Acknowledgment is made o  | f a claim for foreign pri   | ority under 35 U.S.C  | . § 119(a)-(d) or (f).  |  |  |  |  |  |
| a) All b) Some * c) None of:  |   |   |   |  |  |  |  |  |
| 1. Certified copies of the  | 1. Certified copies of the priority documents have been received.   |   |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |   |   |   |  |  |  |  |  |
| 3. Copies of the certified  | d copies of the priority of the International Bureau  | documents have bee<br>u (PCT Rule 17.2(a))  | n received in this National Stage   |  |  |  |  |  |
| 14) Acknowledgement is made   | of a claim for domestic   | priority under 35 U.  | S.C. § 119(e).  |  |  |  |  |  |
| Attachment(s)   |   |   |   |  |  |  |  |  |
| 15) Notice of References Cited (PTO-892)  16) Notice of Draftsperson's Patent Drawin  | g Review (PTO-948)  |   | ew Summary (PTO-413) Paper No(s)<br>of Informal Patent Application (PTO-152)  |  |  |  |  |  |
| 17) Information Disclosure Statement(s) (P  | TO-1449) Paper No(s)  | 20)  Other:   |   |  |  |  |  |  |
| U.S. Patent and Trademark Office<br>PTO-326 (Rev. 01-01)  | Office Action   | Summary   | Part of Paper No 10   |  |  |  |  |  |

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## **DETAILED ACTION**

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-27, drawn to entomopox viral vectors, cells containing said viral vectors and methods of providing a mammal with a therapeutically effective amount of a protein using said vectors, classified in classes 435 and 514, subclasses 320.1 and 325, and 44 respectively.
- II. Claims 28-61 and 74, drawn to an isolated polynucleotide encoding an Amsacta moorei entomopox virus protein, classified in class 536, subclass 23.1.
- III. Claims 62-73 and 75, drawn to isolated Amsacta moorei entomopox virus proteins, classified in class 530, subclasses 300 or 350.

The inventions are distinct, each from the other because of the following reasons:

- 1. Inventions I and II are distinct in that the isolated polynucleotides encoding an amscata moorei entomopox protein encode a single protein and as such cannot be used as viral vectors to express proteins in cells *in vitro* or *in vivo*. Further, the viral vectors of invention I encode and are capable of expressing a therapeutic protein not required for the isolated polynucleotides of invention II. As such the search for isolated nucleotides encoding entomopox proteins is not coextensive with that required for searching entomopox vectors.
- 2. Inventions I and II are distinct from invention III as isolated proteins differ substantially from polynucleotides and vectors encoding those proteins in terms of structural, physical, and

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functional characteristics. Further, proteins can be isolated directly from the virus or chemically synthesized and do not require the nucleic acids of inventions I or II for their production or use.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, different classification, and different search requirements, restriction for examination purposes as indicated is proper.

This application contains claims directed to the following patentably distinct species of the claimed invention:

- 1) For invention II, claims 28-61 and 74, drawn to an isolated polynucleotide encoding an Amsacta moorei entomopox virus protein the claimed species are:
- a)triacylglyceride lipase
- b) superoxide dismutase,
- c) CPD photolyase
- d) baculovirus-like inhibitor of apoptosis
- e) first poly(a) polymerase small subunit
- f) second poly(a) polymerase small subunit
- g) first DNA polymerase
- h) second DNA polymersase
- i) ABC transporter-like protein
- j) Kunitz-motif protease inhibitor

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k) poly(A) polymerase large subunit

1) one sequence from the list of 40 polynucleotides recited in claim 74 or 75

2) for invention III, claims 62-73 and 75 drawn to an isolated polypeptides comprising an Amsacta moorei entomopox virus protein the claimed species are the same as those listed as a)-l).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for Invention III or Invention III from the list of a)-l) above for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 28, 62, and 74-75 are generic.

Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement if the applicant elects Invention II or Invention III, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to

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be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication from the examiner should be directed to Anne Marie S. Beckerleg, Ph.D., whose telephone number is (703) 306-9156. The examiner can be reached Mon-Thurs and every other Friday from 9:30-7:00. If the examiner is not available, the examiner's supervisor, Karen Hauda, can be reached at (703) 305-6608. General inquiries should be directed to the group receptionist whose phone number is (703) 308-0196. The official fax number is (703) 308-4242.

Dr. A.M.S. Beckerleg

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